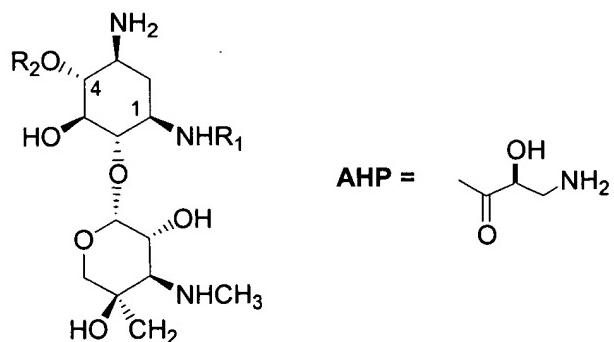


TITLE: New Aminoglycoside Antibiotics as

Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US



Gentamicin-Based

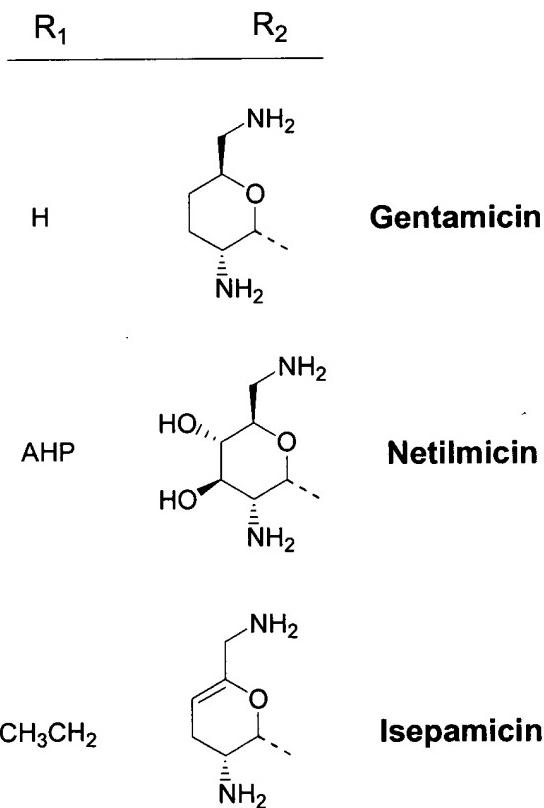
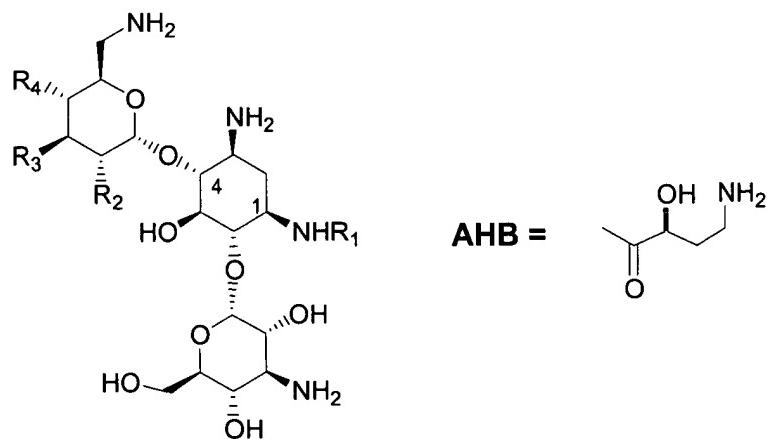


FIGURE 1

TITLE: New Aminoglycoside Antibiotics as Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US



Kanamycin-Based

R₁	R₂	R₃	R₄	
AHB	OH	OH	OH	Amikacin
H	NH ₂	OH	OH	Dibekacin
AHB	NH ₂	H	H	Arbekacin
H	NH ₂	H	OH	Tobramycin

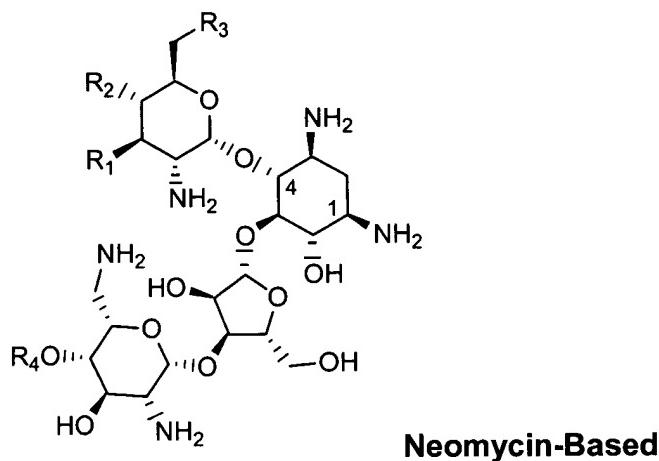
FIGURE 2

TITLE: New Aminoglycoside Antibiotics as

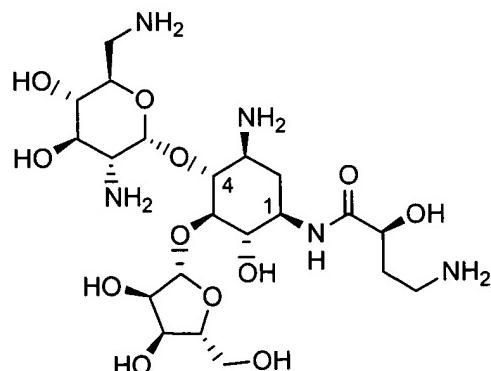
Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US



	R ₁	R ₂	R ₃	R ₄
Neomycin	OH	OH	NH ₂	H
Paromomycin	OH	OH	OH	H
Lividomycin	H	OH	NH ₂	Mannopyranose



Butirosin

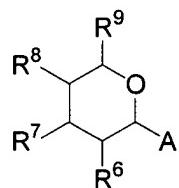
FIGURE 3

TITLE: New Aminoglycoside Antibiotics as

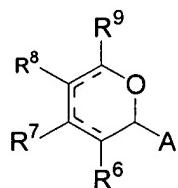
Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

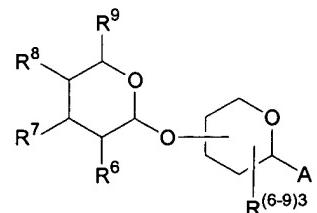
DOCKET: 8024-004-US



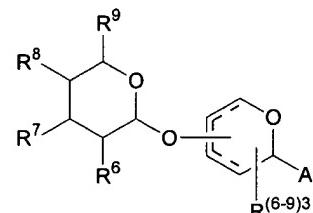
(IIa)



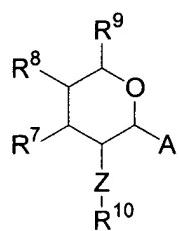
(IIIa)



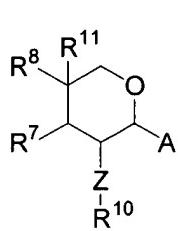
(IIa-1)



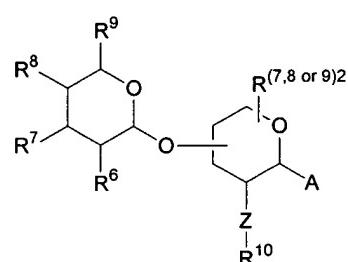
(IIIa-1)



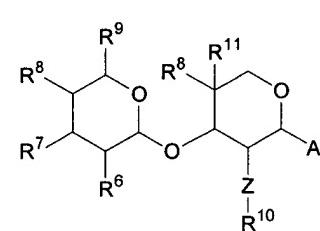
(IVa)



(Va)



(IVa-1)



(Va-1)

--- represents a double bond at either C2-C3, C3-C4 or C4-C5

(IIa - Va) \equiv (R)₄

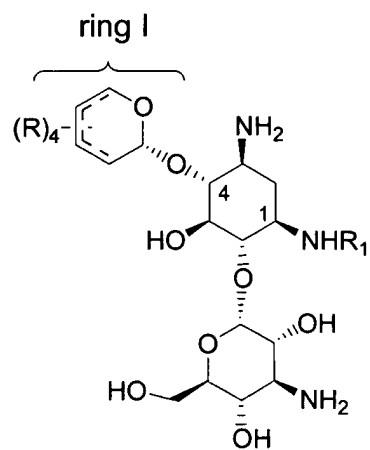
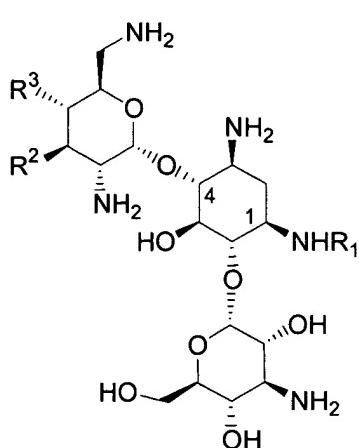
(IIa-1 - Va-1)

FIGURE 4

TITLE: New Aminoglycoside Antibiotics as Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

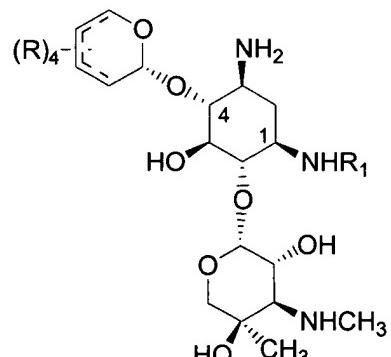
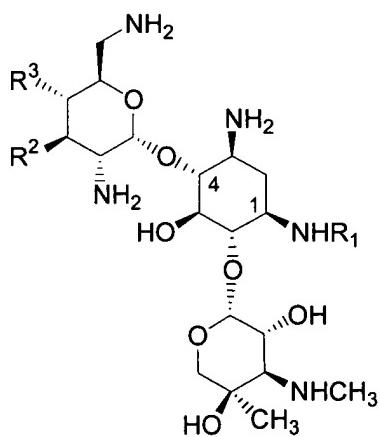
DOCKET: 8024-004-US



"Ring I" Substituted

R₁	R₂	R₃	
AHB	H	H	Arbekacin
H	H	OH	Tobramycin

R₁
AHB
H



"Ring I" Substituted

R₁	R₂	R₃	
H	H	H	Gentamicin
AHP	H	H	Netilmicin

R₁
H
APH

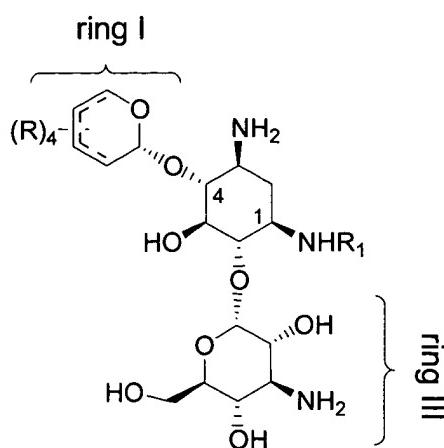
FIGURE 5

TITLE: New Aminoglycoside Antibiotics as

Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US



"Ring I" Substituted

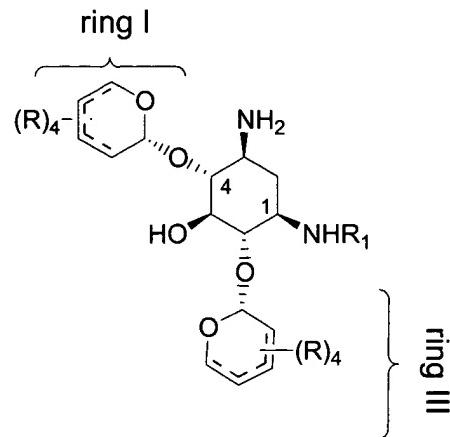
R₁

AHB

AHP

Ethyl

H



"Ring I and Ring III" Substituted

R₁

AHB

AHP

Ethyl

H

FIGURE 6

TITLE: New Aminoglycoside Antibiotics as
Novel Anti-Infective Agents
APPLICANTS: Chang-Hsing Liang, et al.
DOCKET: 8024-004-US

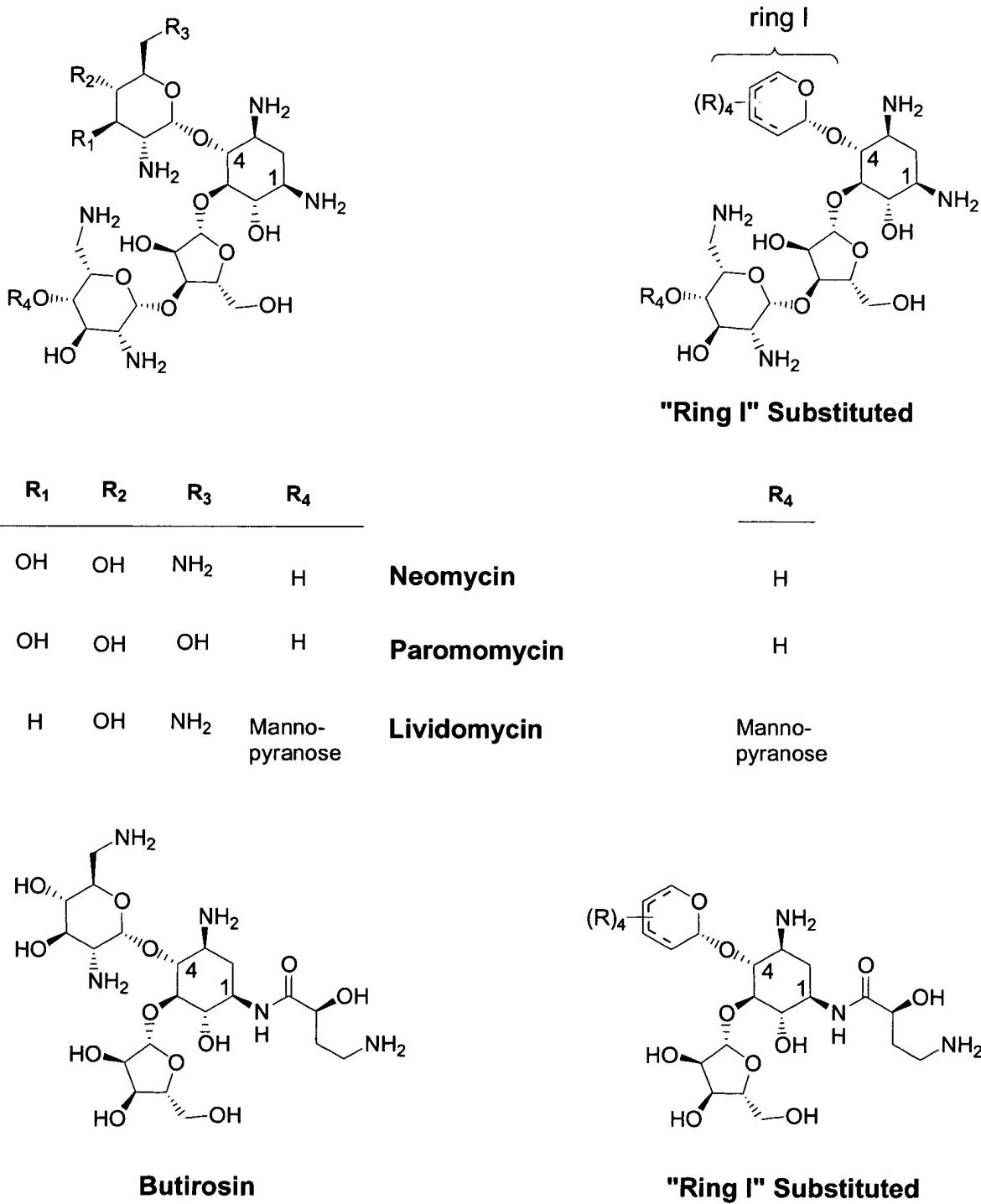


FIGURE 7

TITLE: New Aminoglycoside Antibiotics as

Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US

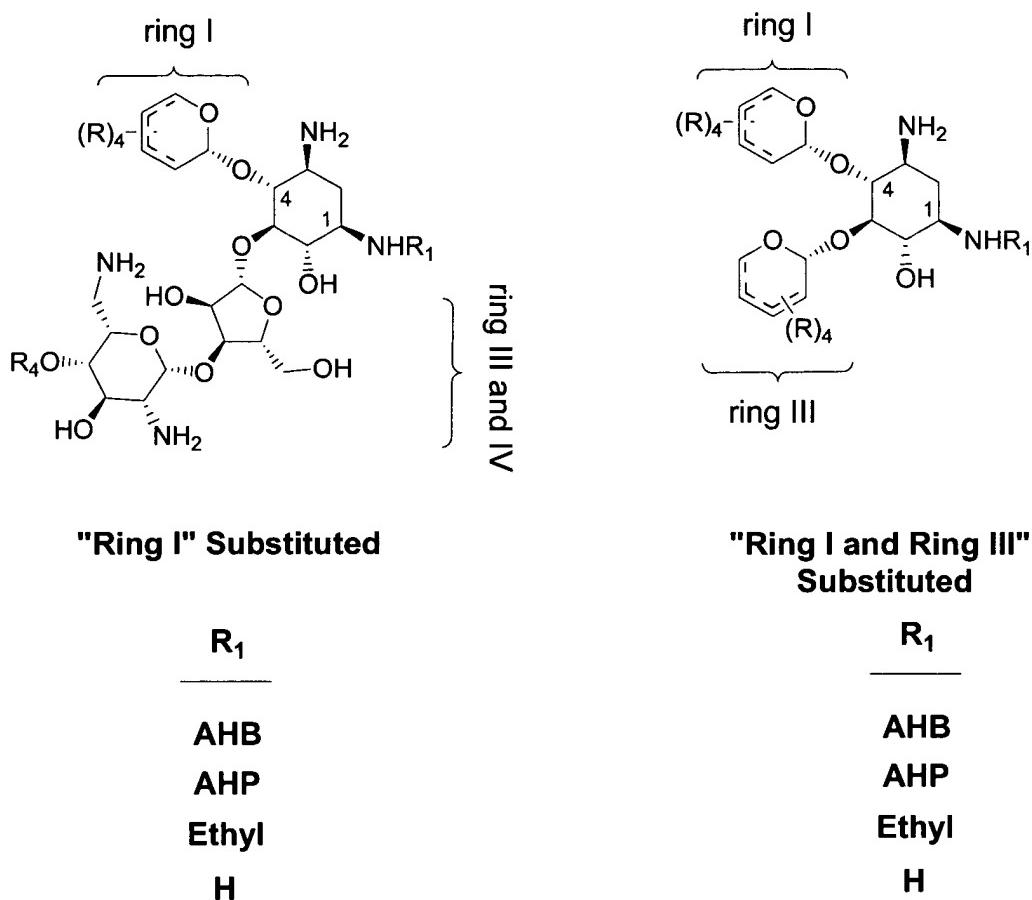


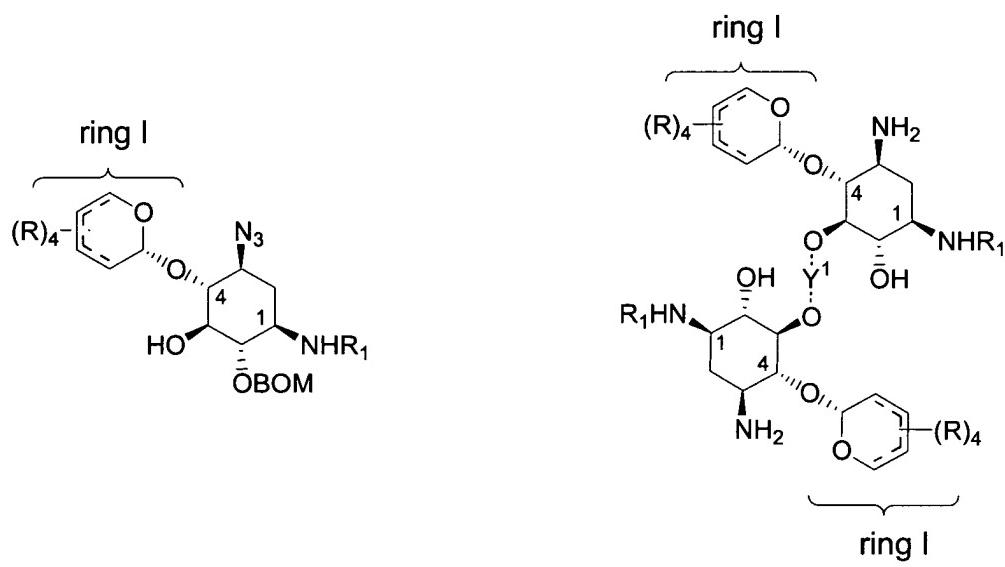
FIGURE 8

TITLE: New Aminoglycoside Antibiotics as

Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US



"Ring I" Substituted

R_1

AHB

AHP

Ethyl

H

4,5-Substituted

R_1

AHB

AHP

Ethyl

H

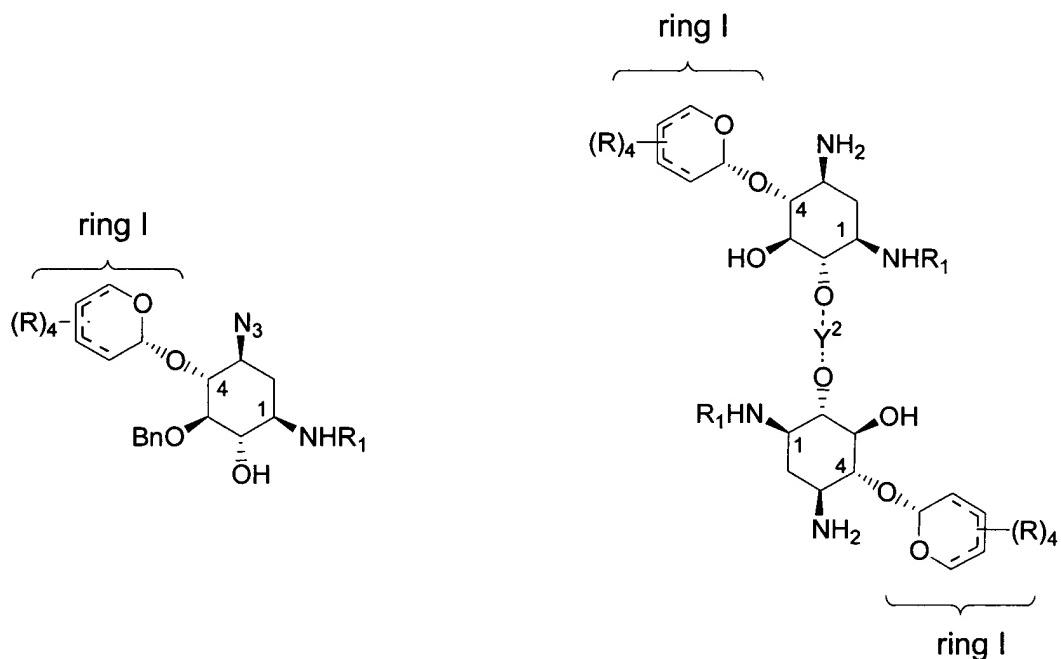
Y^1 = divalent linking group

FIGURE 9

TITLE: New Aminoglycoside Antibiotics as Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US



"Ring I" Substituted

R_1

AHB

AHP

Ethyl

H

4,6-Substituted

R_1

AHB

AHP

Ethyl

H

Y^2 = divalent linking group

FIGURE 10

TITLE: New Aminoglycoside Antibiotics as

Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US

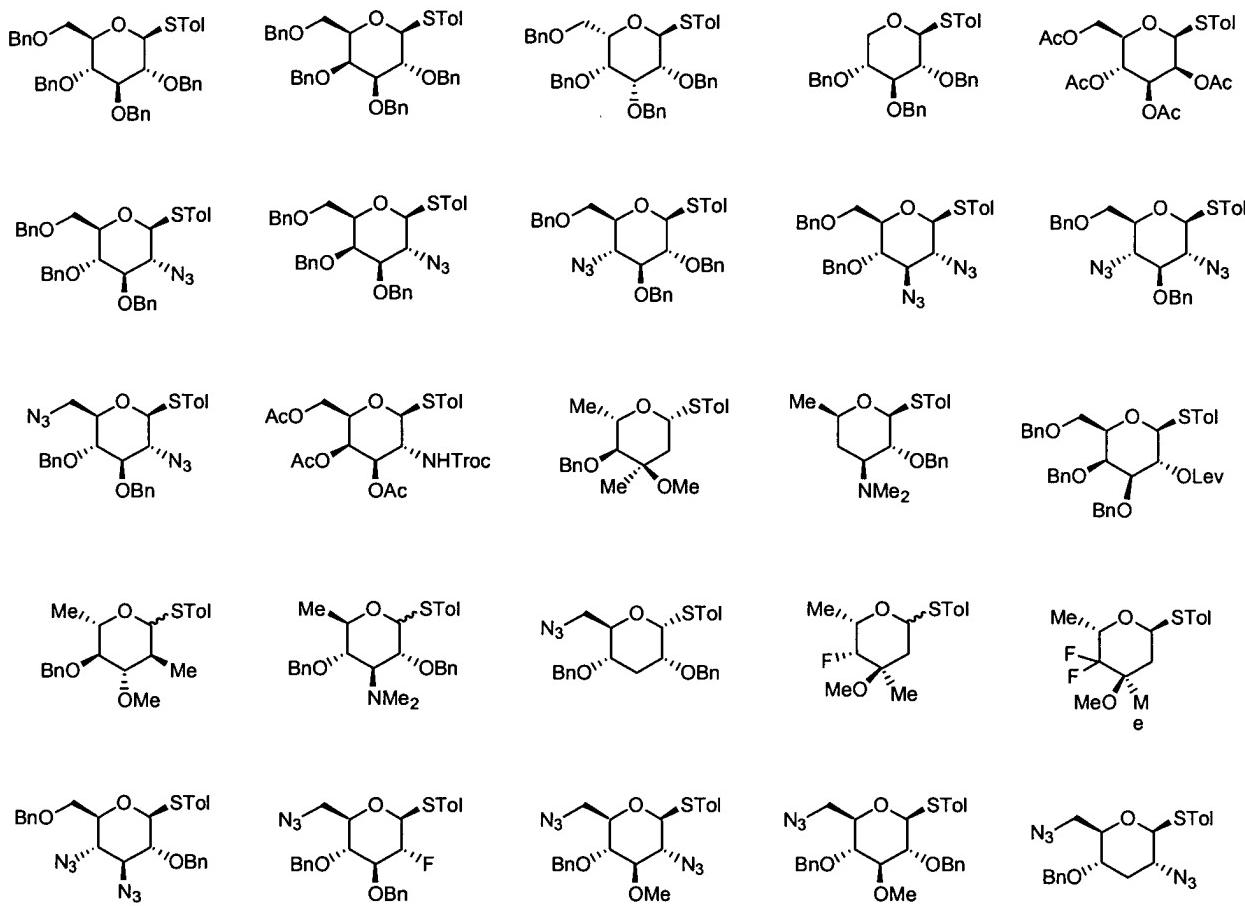


FIGURE 11

TITLE: New Aminoglycoside Antibiotics as Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US

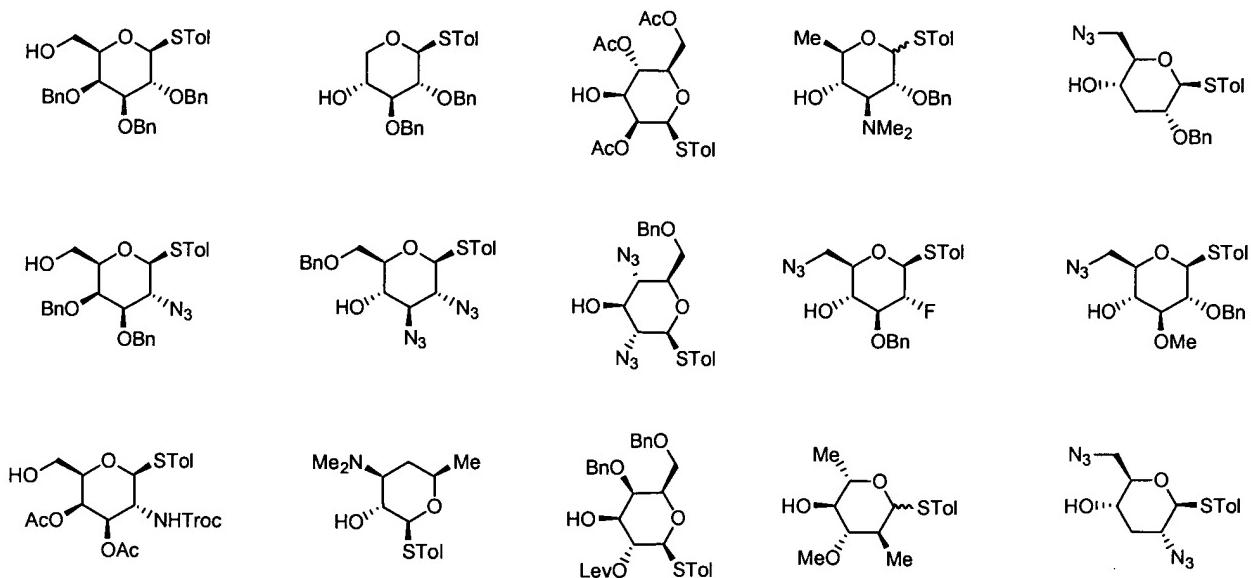


FIGURE 12

TITLE: New Aminoglycoside Antibiotics as

Novel Anti-Infective Agents

APPLICANTS: Chang-Hsing Liang, et al.

DOCKET: 8024-004-US

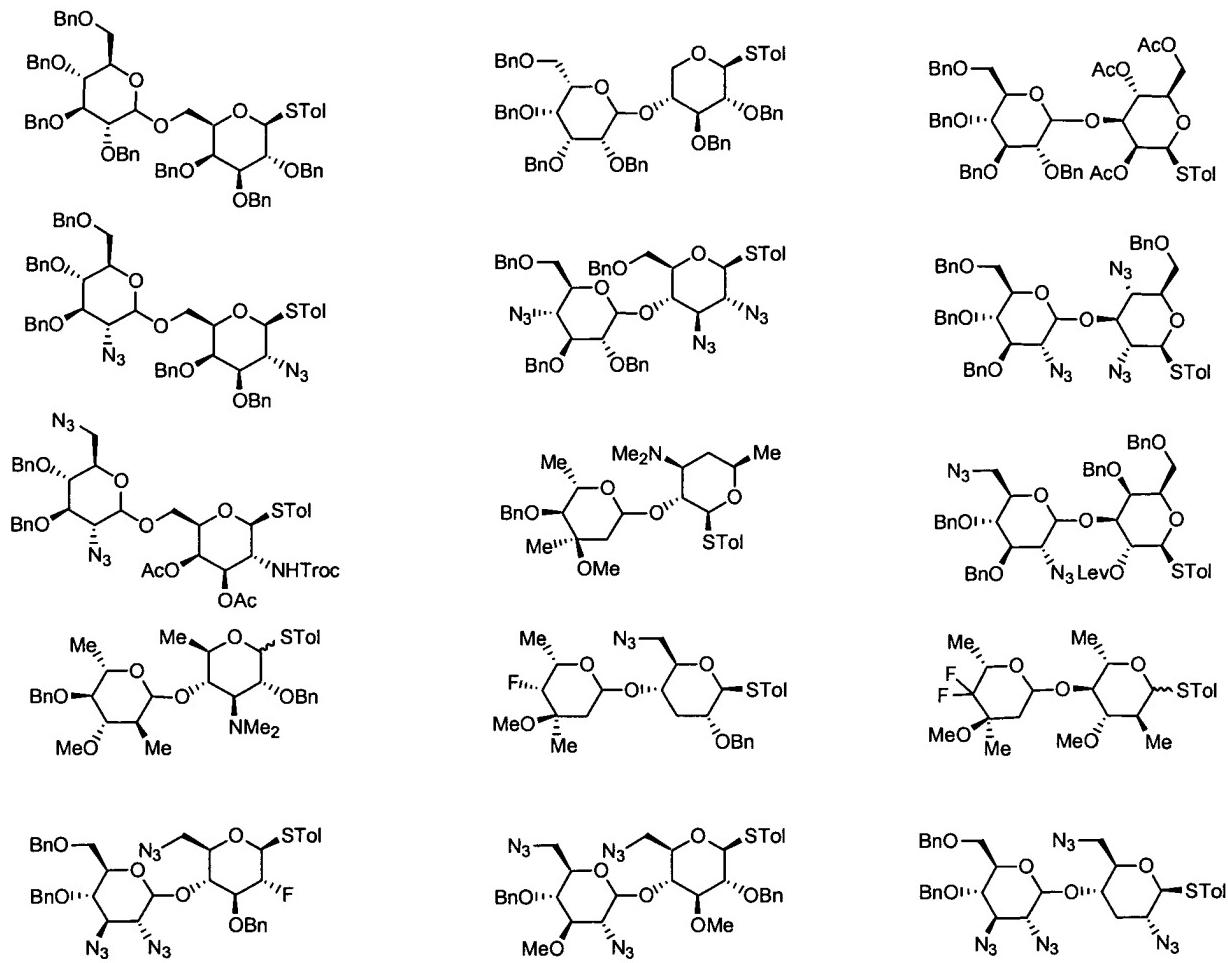


FIGURE 13